

# Development of a formalised skills-based tutorial system in support of student learning

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A formalised skills-based tutorial system in support of student learning has been devised, stitched into core Level 1 modules, and requiring student self study and individual student inputs in small group (maximum 5) compulsory tutorials. The aim has been to co-ordinate the development of the six (Foundation Degree) key transferable skills and to underpin career management activities by fostering, in first year students, a feeling of 'belonging' through the strengthening of personal progress planning.

The outcome has been a series of skills-related tutorial topics providing training in relevant study techniques (involving all staff irrespective of discipline) with student guidance notes on task completion, a mechanism for encouraging students to use assessment feedback from all sources in a constructive and reflective manner and a means for monitoring student attendance and performance which, it is envisaged, should lead to improvements in Year 1 retention rates.

Our system has recently been evaluated at a full Biosciences divisional meeting. Unanimous acceptance by all 20+ staff with some discussion on, and modification to, the proposed mode of assessment for the subject-specific extended essay and the nature of the numerical exercise on statistics and use of calculators. Potential rooming problems were voiced. The project is now virtually completed and is ready for an October start, apart from final agreements on the format of the skills diaries/recording systems which will form the basis of a Science student's Progress File.

## Background and rationale

In February 2001 Professor Mantz Yorke informed the House of Commons Select Committee on Higher Education that 1 in 6 undergraduates give up their degree studies and 30% of the withdrawals occur in term 1 of Year 1. Amongst the many causes he identified was 'a growing lack of personal contact between students and their tutors.' We too have linked this haemorrhaging (in our case loss of life science blood!) to possible lack of support in the early part of Year 1.

Building upon our excellent performance in TQA, the Biosciences Division has been enhancing its reputation for student support and guidance by addressing further the thorny issues of attendance and retention through a review of its tutorial systems.

The current tutorial system in Biosciences is mainly subject-based and module-specific. As the modules progress, there is a tendency for attendance to decrease with usually no check or follow up on absenteeism. There is little perceived co-ordination of the skills that are currently included in the subject-based tutorials and limited formative feedback. Module tutorial numbers tend to be large (15–25) with the result that weak students with poor skills often do not contribute to, and consequently do not benefit from, the tutorial provision. The intention here is to address most of the above deficiencies, thereby strengthening students' personal progress planning, and, in addition, to provide a sound basis for a Level 3 proposed Graduate Skills module, which will be core for all Biosciences programmes commencing 2002.

The general aims are:

- to foster a feeling of 'belonging' and provide a less formal link between staff and students
- to deal with (or arrange for relevant persons to deal with) specific academic and pastoral problems
- to develop and maintain students' enthusiasm for subjects within the Biosciences scheme of Awards
- to provide training in relevant study and key skills
- to monitor individual students' progress
- to provide feedback of formatively assessed student work and encourage students to use assessment feedback from all sources in a constructive and reflective manner

- to foster the development of career management skills and encourage students to plan for eventual employment and/or further study

### Outcomes of the professional skills tutorial system

Meeting / Date		Activities & Outputs		Key Skills
Induction Week	Social Gathering	Icebreaker		
<b>Tutorial No. 1</b>  <b>Mid-Late OCT</b>	<p>Prior to tutorial, as part of AB1001 intensive week WWW exercise, tutees will have established e-mail contact via Biosciences intranet and provided a Personal Portrayal ProFile. Discussion on tutor &amp; tutee specialisms. Essay from IT Word on AB1001 should have been received, marked (graded pass/fail) and feedback sheet discussed. Tutees informed about key skill assistance sources, feedback diaries and given a list of 2<sup>nd</sup> essay (extended) topics for selection. Initial thoughts on planning</p> <p><b>Work for Tutorial 2</b> – AB1001 Units &amp; Measurement Exercise to be completed and handed in by agreed deadline. Selection of extended essay topic confirmed via e-mail and tutee preparation of short talk (5 min) on choice of topic and aspects to cover. Complete feedback diary page.</p>		<b>Communication</b>  <b>Use of Information Technology</b>  <b>Application of Number</b>	
<b>Tutorial No. 2</b>  <b>End of NOV</b>	<p>As part of AB1001 tutors will have marked U/M exercise and completed feedback forms for discussion in this tutorial. Tutees will undertake an additional unseen short U/M exercise to enforce/check understanding. Tutees will give a 5 min presentation on extended essay topics and provide entries from skills feedback diaries for checking.</p> <p><b>Work for Tutorial 3</b> – produce outline plans for extended essay which will be written over Xmas vacation/IS period. Prepare commentary on reference listings and short talk on plans. Keep feedback diaries up-to-date. Select lowest graded piece of assessed work from Level 1 modules (not AB1001) and critically analyse. Tutees prepare for a 3 min oral presentation explaining how they have reflected on this and reacted to the feedback comments.</p>		<b>Application of Number</b>  <b>Problem solving</b>  <b>Improving Own Learning &amp; Performance</b>	

<b>Tutorial No 3</b>  <b>Mid DEC</b>	Tutees complete oral presentations on extended essay topics and assessment feedback. Tutors complete interim reports on student progress. Assessment criteria for essay handed out <b>Work for Tutorial 4</b> – AB1001 CPDLP Skills Tracker and Interests & Working Styles Profiles completed with help of families and friends + SWOT analysis and handed in by set date. Complete extended essays and hand in by stated deadline, together with self-assessment of their work judged against prediscovered criteria. <b>Note</b> : remind students to bring calculators to T4	<b>Communication (oral)</b>  <b>Improving own learning &amp; performance</b>
<b>Tutorial No. 4</b>  <b>Early FEB</b>	Return extended essay with completed front sheet feedback form. Summarise collective strengths and weaknesses of essay writing/IT skills. Return SWOT analysis with appropriate commentary. Collectively complete first statistical exercise (red/green leaf disks) with instruction on use of calculators for SD etc. <i>minimum of 30 minutes</i> <b>Work for Tutorial 5</b> – complete 2 <sup>nd</sup> statistics exercise (this time as part of AB1000) by set deadline. Up-date skills feedback diaries.	<b>Improving own learning &amp; performance</b>  <b>Application of Number</b>
<b>Tutorial No. 5</b>  <b>Late MAR</b>	Tutees ' work on AB1000 statistics package returned with appropriate grade and feedback comments. Check feedback diaries and plan activities and tasks for group poster exercise. Topic to be based upon students' choice of best extended essay submitted by the group. <b>Work for Tutorial 6</b> – complete group poster work and up-date feedback diaries.	<b>Application of Number</b>  <b>Communication</b>
<b>Tutorial No. 6</b>  <b>Early MAY</b>	Tutors to conduct process review of poster group work and tutees to provide a group critique of poster presentation. Group assessment of all posters according to the specified pre-disclosed assessment criteria. Tutors to complete individual structured student reports leading into Progress Files developments. Tutees negotiate entries into Progress Files	<b>Communication</b>  <b>Teamwork</b>  <b>Improving own learning &amp; performance</b>

## Benefits

The principal benefits are believed to be:

- Small group tutorials (max. 5 tutees) based on skills themes common to all first year students on Biosciences programmes with no extra timetable commitment other than that already allocated to Year 1 tutorials
- Career Skills Management as part of formal curriculum designed in such a way as to enable students to reflect on their progress
- Students to keep skills diaries (which would be checked and verified) to include action planning relating to feedback and career skill management activity

- Customisable IT-based recording of achievements and attendance which could form a basis for Progress File developments and the introduction of Personal Academic Records
- Existing paper-driven system eventually becomes integrated into Biosciences intranet portals
- Experience gained by all participating staff at satisfying skills requirements for newly proposed Foundation degrees
- Improved attendance at—and involvement in—tutorials
- Improved student support and, hopefully, retention

## Evaluation

The Professional Skills Tutorial system was presented to a full meeting of the divisional staff on 11<sup>th</sup> May 2001 (2.00–4.00pm) which was specifically designed to discuss the proposals. It was accepted unanimously and in entirety. The following points were the focus of discussion:

1. Potential rooming problems with the loss of MA106 and the changes in staffroom accommodation. However the intention is to utilise the Library Skills rooms
2. There was considerable debate on the extended essay and whether this should be conducted in an exam setting, like a seen paper or as a set assignment. This was eventually resolved by a vote which accepted the system as proposed i.e. a coursework assignment
3. One member of staff asked that experience in using calculators should not be applied to the statistics packages but rather that basic numerical data be supplied.

## Future developments

Following the implementation phase which commences in October 2001, the system will be developed thus:

- ongoing refinements to the individual tutorial sessions with particular emphasis upon the key skills **application of number** and **improving own learning and performance**
- improvements to the skills tracker/self-audit exercises with possible industry backing
- student evaluations via purpose-designed module-related questionnaires and staff/student liaison group meetings
- incorporation of the skills diaries into Science Progress File formats
- creation of a disk-based Personal Academic Recording System
- further external evaluation and review

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